

REMARKS

This amendment is submitted concurrently with a request for continued examination, an extension under 37 C.F.R. §1.136(a), and a form PTO/SB/8A citing new prior art references. A new set of claims is presented to overcome the rejections in the official action mailed March 8, 2007, and to define the invention so as to distinguish over the prior art newly cited by applicant.

In the official action, objection was made to a recital in the claims of “the automated dialog being non-predefined to the system” as lacking support by written description in the specification. Also, the claims were rejected as anticipated by US Patent 7,034,691 – Rapaport et al., under 35 U.S.C. §102.

The claims have been amended to eliminate the phrase to which objection was made.

The claims also have been amended to clearly distinguish over Rapaport. The invention now claimed as a whole, is not disclosed or suggested by Rapaport, nor does Rapaport suggest that it would be possible or useful to provide a system as claimed. Rapaport does not demonstrate that the invention claimed as a whole would have been known or obvious.

Applicant's field of endeavor, like that of Rapaport, concerns automated communication dialogs that advantageously involve telephone calls or other exchanges of communications. One party to the communication is a programmed system that is executing an automated dialog. The other party is a human subject.

However applicant's invention, unlike Rapaport, concerns another level, namely a system that facilitates composing such dialogs. Applicant's system provides to a human composer (the “configurator”) a choice of dialog components that can be selected as a sequence of operations that achieve functions. Applicant's claimed invention concerns composing dialogs and not merely running dialogs.

Automated communications systems as provided by applicant, Rapaport and others, are directed by a programmed processor to make a succession of calls over a telephone network. Data memory accessible to the processor is accessed for the caller numbers and associated details. The systems are also coupled to a phone network over which calls to remote subjects are made. The systems read out certain information to the remote subject, and collect responses from the remote subject.

Rapaport teaches a programmed system that is directed to serving a medical information database and its customers. For this purpose, Rapaport teaches interfacing a telephone system with a medical information database, from which information directs calling remote subjects by telephone, prompting the subjects for information, and updating the medical information database.

In order to achieve the objects of remote calling based on information stored in a data memory, it is necessary to operate a program wherein the operations of the system are defined in acute and extensive detail. These include memory access, bidirectional communications using audio signals carrying information, and various logical and arithmetic computations. It is necessary to program the system.

Rapaport teaches a finished programmed system that has a good deal of complexity. But Rapaport does not teach or suggest any sort of system to manage and assist in composing a program that such a system shall execute. To specify and build Rapaport's system, technicians and programmers with expert knowledge of the manner in which needed to apply their knowledge of numerous technical details of database storage, memory access, computer programming, text to speech outputs and speech comparison inputs, DTMF signaling, answering machines and the like. These programmers conceived and specified a system with knowledge of how every element is embodied and operated. The programmers in Rapaport developed a system. The Rapaport system has no aspects whatsoever that are useful in the development and programming of such systems in general, for various purposes. Rapaport does not teach or suggest a system for composing the

programming of such systems, i.e., for selecting and sequencing operations in a versatile way under control of a program composing configurator.

Applicant's system is directed to composing sequences that are made of modular elements (dialog components) that are assembled by a programmed process under control of a human operator (the configurator). This technique permits versatile programs to be composed by a configurator who need not understand all the specifics of databases, data files, audio communications, programming loops, etc. The configurator is offered options that embody all necessary details, and the system assembles the program based on the configurator's selections.

Applicant's systems can compose a sequence of dialog components that service a medical information database, such as tending to pharmaceutical prescriptions, renewals and information as in Rapaport. However, applicant's system is not limited to a program. Applicant's innovations are not in the servicing of a database by a programmed telephone calling robot with audio/text conversion capabilities. Applicant's innovations concern techniques by which the dialogs or scripts are composed and therefore is different and more versatile and is not met or suggested by the disclosure of a given program, namely that of Rapaport.

According to the claimed invention, applicant provides a system wherein a programmed processor presents, for selection, a variety of options for different operations that the dialog or script might carry out. By means of an interface, a human configurator selects among options that are offered. The programmed processor handles the details of interaction between the operations, which are the dialog components that are selected and whose operations are governed according to certain limited choices made available to the configurator. For example, the configurator might select a subset of possible call targets from the database, but need not understand how to address and manipulate database fields. The configurator might choose among policy options such as what times of day the dialog will run, but need not understand the machine level commands for reading the system time-of-day clock and/or how a programmed status loop may idle the system until the

target time arrives. The configuror may be prompted to select a maximum number of re-tries to be made for a call and a maximum number of audio prompts to attempt to elicit a particular reply, but is not called on to understand and apply nested programming loops.

In using applicant's invention, it is not necessary for the configuror to know or appreciate databases, memory access, text to speech or speech to text conversion, DTMF signaling, answering machines or other details. The user (the configuror) need only select among options presented by the programmed processor that assists the configuror in composing the program that when executed carries on a communication with a remote subject.

These aspects of a system for composing dialogs are set forth in the claims as amended, and distinguish the invention from Rapaport. Rapaport teaches little or nothing about a process for composing dialogs. Rapaport does not teach that it would be possible or advantageous to program a system not only to make calls but to handle the job of composing the sequences that will define and control calls.

Applicant's system assists the configuror in selecting and concatenating dialog components offered to the configuror, into a program composed to operate according to the configuror's selections and options. The process permits the configuror to select from a roster of possible dialog components, offered by the programmed system. The programmed system manages the selection and configuration of the dialog components and options so that they run together as an operable dialog. Thus it is not necessary for the configuror to know and understand underlying program complexities.

No new matter is presented. In the specification, the programmed processor, sometimes named the "definer" or the "wizard," is discussed from paragraphs [0047] to [0059] and specific embodiments are set forth from paragraphs [0060] to [0099]. At paragraph [0049], the wizard (the programmed processor handling the composition steps) is controlled by the configuror. The wizard guides the configuror in selecting how the dialog will be delivered; how the process flows; how many

attempts will be made; what audio will be delivered (including a mechanism to create audio). The wizard assembles the interactive dialogs from dialog components wherein a variety of templates are available, from which the user (configurator) selects an interactive flow rather than creating an interactive flow from scratch.

Paragraph [0050] discloses selection by the configurator among policy options, such as how and when the dialog is delivered. These policies can vary with the profile of the recipient or remote subject.

Paragraph [0052] states that the definer (namely the programmed processor or wizard) assembles sets of logically linked dialogs. The definer constrains the dialog by offering a limited number of choices, thereby reducing or eliminating the potential for error during composition of the dialog and during later execution.

Paragraph [0054] describes a plurality of dialog components that provide modular components or collections, suited for particular operations. Programming such operations would be quite demanding of programmer expertise if programmed from scratch. However the modular components offered by the processor or wizard, and selected by the configurator, can handle a range of operations and interactive functions. These functions include detection of a call to an unintended subject, authentication of a subject, data entry, standard transitions, reacting to communication anomalies such as busy signals or answering machine pickups, prompting with an audio clip, entry of numbers by keystroke or voice data discrimination, etc.

These aspects are particularly and distinctly claimed, are supported by an enabling disclosure, and are not found in or suggested by Rapaport. The amended claims set forth such aspects in detail. Applicant requests reconsideration and withdrawal of the prior art rejection over Rapaport.

Applicant submits herewith a form PTO/SB/8A citing US Patents 5,740,240; 5,917,903; 6,078,325; and 6,463,149, each to Jolissaint. These patents are cited to

illustrate examples of systems that arguably assist in composing interactive telephone and messaging dialogs with remote users. However it will be apparent that the Jolissaint patents do not disclose or suggest the idea of a programmed processor to assist in assembling dialog components by offering components that can interact with one another according to options that are offered to and selected by a human configuror. Instead, the Jolissaint patents permit a programmer to sequence low level instructions, programming the system in much the same way that an assembly language programmer might program a general purpose digital computer.

The state of the art as evidenced by Jolissaint is to permit the operator to use the most elementary of building blocks. The operator, as opposed to the system, is expected to understand how the elementary blocks are used to form operational sequences of the elements. There is no suggestion in Jolissaint as to how or why a programmed processor or definer might be arranged to offer larger segments of larger routines as dialog components or to limit the alternatives offered to the configuror in an organized way, such that the configuror is presented only with operable choices of logical options that will work.

In Jolissaint, it is necessary for the programmer to have a great deal of knowledge and expertise with respect to how the hardware components of an interactive communication system are structured and caused to operate. The Jolissaint patents may provide a way for an expert to accomplish complex programmed functions such as database access for number lookup, dialing, DTMF reception, recording and playback of an audio clip, voice or tone recognition, etc. There is no reason to believe that the anyone other than an expert could accomplish such complex programmed functions without more than an available selection of elementary machine instructions.

The steps that are offered to the user by Jolissaint are simply elemental functions of a computer program, e.g., send (output), receive (input), go-to (jump), etc. Jolissaint does not teach or suggest functional modules, i.e., dialog

components as claimed, which define one or more functions that the configuror can select, and that the configuror can tailor by choices presented by the programmed processor, but which components the configuror need not understand in any detail. Thus, the Jolissaint patents fail to disclose or suggest the system disclosed and claimed by applicant.

In the official action, objection was made to the phrase, "the automated dialog being non-predefined to the system." This phrase in claim 1 was intended to define the aspect that the invention is a technique for a configuror to compose dialogs. The invention is more than the execution of an existing dialog that defines the interaction with the recipient (the remote subject of the dialog), including actions that are programmed responses to potential situation such as inputs from the recipient, as contained in a programmed existing dialog as in Rapaport. The claims have been amended to more particularly and distinctly define the function of the configuror and the processor (wizard) to compose a dialog. Furthermore claims also define aspects by which the processor of the invention presents for selection and permits the configuror to choose among level dialog components, the operation of which is tuned using configuror selections of options and policies. Applicant's configuror need not program the system as such, and instead selects among operational choices. The configuror requires only such understanding as needed to select among options offered by the programmed processor (wizard), and does not need the expert knowledge and skills of a programmer.

The claims therefore also distinguish the invention from Jolissaint, wherein insofar as options are available to the programmer, the options are elementary commands reminiscent of opcodes used in assembly language programming, that the programmer must understand in detail, in order to apply.

This subject matter is fully supported in the application as filed. The concepts of composing completed dialogs by offering choices of dialog components to the configuror, applying policies and templates that circumscribe the choices offered, recording and using audio prompts for audio or keypad responses, process

flows such as if/then/else program branches and other details are set forth, for example, from paragraphs [0047] to [0054] of the published application (generally pages 12-17 of the application as filed).

Applicant has amended the claims to clearly and distinctly define aspects that are not found in or routinely suggested by the prior art of record. The original claims have been canceled, without prejudice. The new claims focus on the aspects by which the invention distinguishes over the prior art of record, namely Rapaport, and also over the art of dialog composition assistants as represented by the Jolissaint patents now cited by applicant.

The claims now presented are definite and find enabling support in the original disclosure. The invention claimed as a whole is not disclosed in the prior art now of record. The differences between the invention and the prior art are such that the subject matter claimed as a whole is not shown to have been obvious.

This response substantially advances prosecution of the case upon filing the accompanying RCE. Reconsideration and allowance of claims 42-51 are requested.

Respectfully submitted,

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